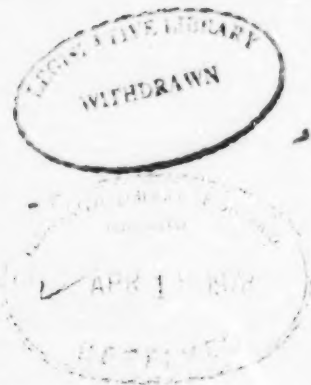


Sask  
Health  
Hearing

# Saskatchewan Hearing Aid Plan



**ANNUAL REPORT**  
**1976 - 1977**

Province of Saskatchewan  
Department of Health  
3211 Albert Street, Regina  
S4S 0A6



## SASKATCHEWAN HEARING AID PLAN

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- II. Answers to Frequently Asked Questions.
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## I. HIGHLIGHTS FOR 1976-77

- \* 8,160 beneficiaries received services from SHAP. Of these 53.7% were 65 years of age or over and 17.3% were 20 years of age or under.
- \* 20,816 individual services were provided with an average of 2.55 services per beneficiary.
- \* The major portion of SHAP's clientel continues to be the geriatric patient. Persons over the age of 65 purchased 63.4% of the aids sold.
- \* 4,890 beneficiaries received audiological evaluations and 44.2% of these were fitted with hearing aids.
- \* The average cost of a complete audiological evaluation, hearing aid fitting and follow-up was \$151.14 per hearing aid disposed.
- \* The average cost of a hearing aid to a beneficiary was \$95.10 an increase of 78¢ over 1975-76.
- \* The average cost for testing a beneficiary not recommended to purchase hearing aids was \$50.36.
- \* 58.2% of the services provided by SHAP were received by beneficiaries outside the cities of Saskatoon and Regina.
- \* A total of 6,214 repairs were made by SHAP during fiscal 1976-77. The breakdown of these repairs are:  
Major repairs (microphones, amplifiers, receivers, etc.) -3,043  
Minor repairs (earmolds, tubing, wiring, etc.) -3,171.
- \* Staff shortages during the year due to difficulties in the recruiting of professional staff resulted in the loss of approximately 24 man months.
- \* 28 auditory trainers were provided to pre-school hearing impaired children. These were purchased in co-operation with the BPO Elks Purple Cross Deaf Detection and Development Program. Positive language development is reported in these children.
- \* The plan to establish quality permanent facilities and equipment in each Health Region continues. Facilities in three Regions were completed this year.

## II. FREQUENTLY ASKED QUESTIONS

Q. How will I know if I need a Hearing Aid?

A. A number of hearing tests will be performed by a qualified audiologist. The audiologist will determine the extend of the hearing loss and the effect on communicative abilities. If there is any question of the need for medical intervention, referral from a physician will be required before a hearing aid is fitted.

Q. What kind of hearing aid will SHAP provide?

A. There are four basic hearing aid configurations. These are the behind the ear type, the eye glass aid, the body aid and the all in the ear type aid. The needs and hearing loss will dictate the choice of aid. SHAP has several dozen models available.

Q. What will a hearing aid do for hearing loss?

A. A hearing aid is a minature amplifier. It has the function of making sounds louder although not necessarily clearer. Because of its ability to respond better to some pitches than others, the hearing aid can help compensate for a hearing loss at specific pitches or frequencies. The end result is an improvement in the ability to hear sounds in the environment and the sounds of speech. A hearing aid will not restore hearing to "normal".

Q. What does SHAP charge for its Services?

A. SHAP provides testing and fitting of hearing aids at no cost. Clients are expected to pay for the cost of the hearing aid, an earmold, and batteries.

Q. How much will the aid, earmold and batteries cost?

A. The price of an aid varies. SHAP sells the aid at government cost. At the present time, the average cost of an aid is about \$100. An earmold costs about \$6.00 and batteries vary depending on size and quantity. A typical battery costs 40c.

Q. Suppose I change my mind or don't like the aid I bought?

A. SHAP allows a trial period of 60 days for the aid. If during that period the client is not satisfied, the cost of the hearing aid is refunded in full.

Q. What if I have a problem with my aid?

A. SHAP guarantees its aids for a full year. If the aid breaks after a year and the problem is minor, it is repaired without cost. Major repairs require sending the aid back to the manufacturer. If the problem is in adjusting to wearing the hearing aid, SHAP can also help. SHAP has sold thousands of aids to thousands of Saskatchewan residents and is aware of the difficulty some people have adjusting to a hearing aid. SHAP's expertise is helpful in overcoming a persons' fears and other problems.

Q. Suppose I don't have all the money at once?

A. SHAP has an interest free installment plan. A nominal one time charge is levied to cover bookkeeping costs.

Q. How do I arrange to see SHAP?

A. By contacting either of SHAP's main clinics. One is located in Saskatoon and one in Regina. In addition, week-long clinics are held in each health region every month. Call the regional health office of an appointment.



Minister of Health

Provincial Health Building,  
3211 Albert Street,  
REGINA, Saskatchewan.

To the Honourable G. Porteous, M.B.E., C.M., D.D.,  
Lieutenant Governor of Saskatchewan.

MAY IT PLEASE YOUR HONOUR:

I am pleased to submit the annual report of the  
Saskatchewan Hearing Aid Plan for the year ended March 31, 1977.

Respectfully submitted,

Ed Tchorzewski,  
Minister of Health.



Province of Saskatchewan

DEPARTMENT OF HEALTH

HEALTH BUILDING  
3211 ALBERT ST.  
REGINA, SASK.  
S4S 0A6

DEPUTY MINISTER

REGINA 10-11-77

To the Honourable Ed Tchorzewski,  
Minister of Health.

Sir:

I am pleased to submit the annual report of the  
Saskatchewan Hearing Aid Plan for the year ended March 31, 1977.

Respectfully submitted,

M. B. Derrick,  
Deputy Minister.

#### IV. ORGANIZATION AND ADMINISTRATION

##### A. OBJECTIVES OF SHAP

The Saskatchewan Hearing Aid Plan was implemented to:

1. Provide high quality hearing aids to residents at greatly reduced costs.

By arranging purchases of large quantities of hearing aids from major manufacturers and distributors on yearly contracts SHAP is able to keep the purchase cost of a hearing aid to a minimum.

2. Provide audiological services by qualified professionals.

Only audiologists with a master's degree are employed by SHAP. The audiologists are assisted by audiometric technicians in the fitting of hearing aids.

3. Insure necessary follow-up services are provided.

This includes periodic monitoring, counselling sessions, and making adjustments to hearing aids where necessary.

4. Provide hearing aid repair service for both SHAP provided aids and others.

SHAP staff perform minor repairs to aids at no cost to the beneficiary. For major repairs the aid is returned to the manufacturer or depot specializing in the repair of all hearing aids. Loaner hearing aids are provided by SHAP until the patients' aid is returned.

5. Provide special equipment to hearing impaired pre-school children.

SHAP assists in the provision of auditory trainers to hearing impaired pre-school children requiring this specialized equipment.

## B. ORGANIZATIONAL OVERVIEW

SHAP is one of the programs of the Regional Health Services Branch of the Department of Health. An Advisory Board with members from many related fields is responsible for reviewing SHAP policies and procedures. At present the board consists of:

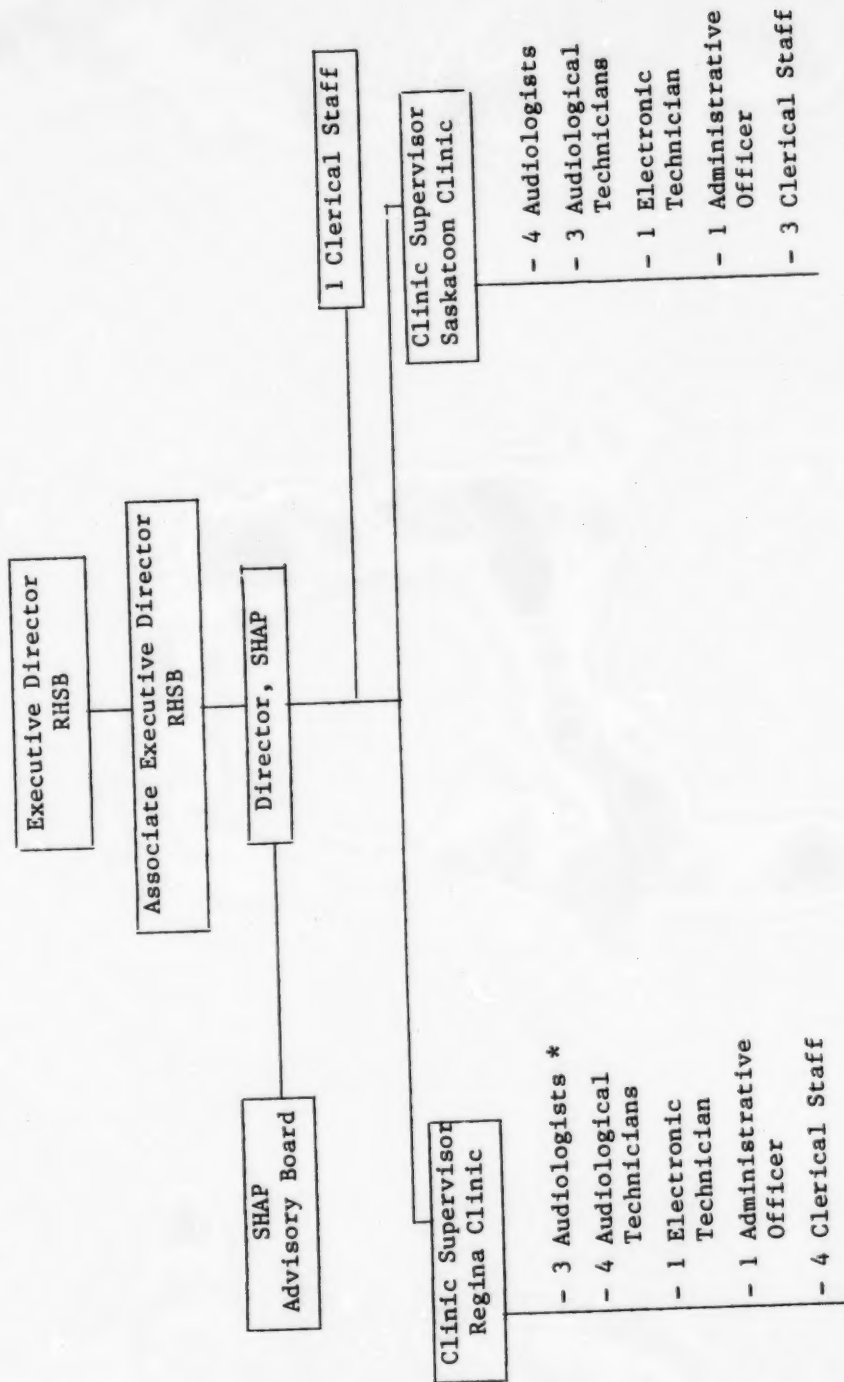
|                                                                                                                                                                         |                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Director of the Saskatchewan Hearing Aid Plan (Chairman);                                                                                                               | Representative<br>Mr. L. A. Hoffman |
| Two representatives from the Otolaryngology Section of the Saskatchewan Medical Association: one from the northern part and one from the southern part of the province; | Dr. E.V.C. Dwersteg<br>Dr. R. Crook |
| Two representatives from the field of Education: one from the Department of Education and one practising teacher of the deaf and hard of hearing;                       | Miss L. O'Connor<br>Miss J. Dean    |
| One representative from the Saskatchewan Speech & Hearing Association; and                                                                                              | Mrs. K. Pederson                    |
| Two consumer representatives appointed by the Minister of Health.                                                                                                       | Mrs. M. Slykhuis<br>Mr. W. Bates    |

Several observers including a public health nursing representative, and the two clinic supervisors attend board meetings.

The Advisory Board continues to operate as it was originally set up although individual members may change. Each member is appointed for a two year term. Concurrent terms are possible.

# C. ORGANIZATION CHART

## SASKATCHEWAN HEARING AID PLAN



\* Includes one vacant position

March 31, 1977

#### D. LEGISLATIVE AUTHORITY

The Saskatchewan Hearing Aid Plan commenced service on August 15, 1973 under the Hearing Aid Act, 1973 and as amended in 1977.

#### E. PERSONNEL

At the termination of the 1976-77 fiscal year, SHAP's staff totalled 29. This number includes the director, two clinic supervisors, seven audiologists, two electronics technicians, seven audiometric technicians, two administrative officers and a clerical staff of eight. The chief audiologist position has been vacant most of fiscal 1976-77.

The appointment of SHAP personnel is made by the Public Service Commission and employees are subject to regulations governing the provincial civil service.

#### F. FACILITIES AND EQUIPMENT

##### Regina Clinic

The Regina Clinic is located on the ninth floor of the McCallum Hill Building at 1874 Scarth Street. Plans call for future acquisition of adjacent office space with the end result being an expansion of present space and equipment such that the Regina Clinic can continue to operate in the central location of Regina's business section.

At present the clinic has an adequate array of diagnostic equipment including sound treated booths, audiometers, electro acoustic impedance bridges, tape recorders, phonographs and other electronic equipment. This diagnostic equipment enables SHAP audiologists to measure hearing acuity for various sounds and speech. Furthermore, the electro acoustic impedance bridge provides a means of objectively evaluating middle ear functioning without surgical or invasive procedures.

Beside diagnostic equipment, the clinic maintains space and equipment for the fitting of hearing aids; electronic testing, and maintenance of hearing aids and diagnostic equipment; and repair of hearing aids. The electronics and repair areas are fully equipped with highly specialized instruments to calibrate and monitor hearing aids and audiometric equipment. These facilities and the services provided in them are made available to other health professionals upon request.

### Saskatoon Clinic

Located on the 6th floor of the Investors Building at 402-21st Street East, the Saskatoon Clinic is very much the twin of the Regina clinic. It too has extensive diagnostic facilities and equipment. The electronics, repair, and hearing aid fitting areas are similar to those in the Regina Clinic.

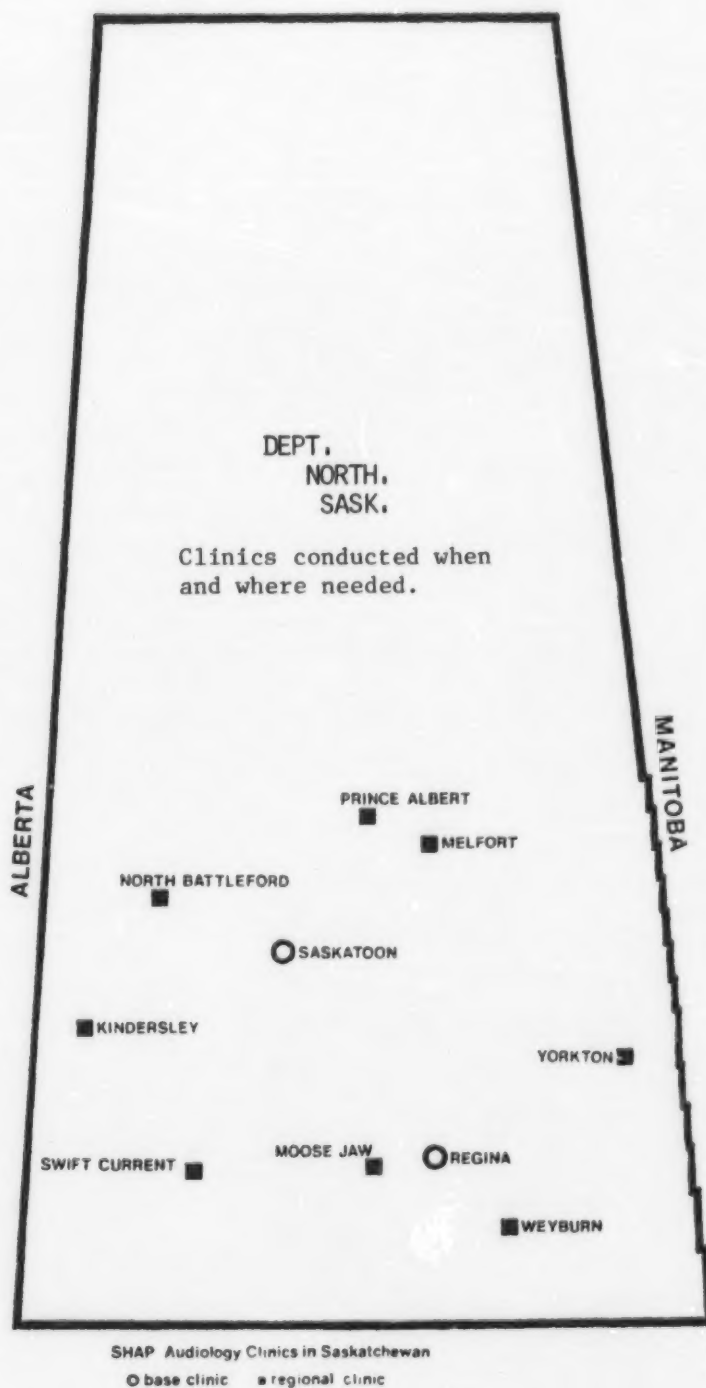
Future plans call for relocating the clinic to the Provincial Government Building now under construction in Saskatoon. The proposed date of this move is in the spring of 1978.

### Regional Clinics

To service the widely dispersed population of Saskatchewan, SHAP conducts regular week long clinics in each health region. SHAP is presently in the process of establishing permanent facilities in each region. During 1976-77, three permanent regional clinics were established. These were located in the Health Building in Prince Albert, Melfort, and Yorkton. Each of these clinics now has a sound treated booth, audiometer, tape recorder and space and equipment for the fitting of hearing aids. It is planned that eventually similar facilities will be located in each region.

FIGURE 1

LOCATION OF  
SASKATCHEWAN HEARING AID PLAN CLINICS  
IN THE PROVINCE



## V. PROGRAM ACTIVITIES

### A. ELIGIBILITY AND BENEFITS

To be eligible for benefits under the Plan a beneficiary must be a resident of Saskatchewan holding a valid Saskatchewan Health Services Card. Some residents are not required to hold valid Saskatchewan Health Services Cards and still may receive benefits under the Plan, for example members of the R.C.M.P. and members of the Armed Forces.

There is no charge to beneficiaries for audiological tests received at the Clinics. Hearing aids recommended by the Plan's audiologists are sold at cost price. All hearing aids sold through the Plan are guaranteed for one year from the date of purchase. This guarantee covers any repairs due to defects in manufacturing. In addition a beneficiary can obtain a refund, for any reason, on a hearing aid purchased through the Plan provided it is returned within 60 days from the date of purchase. The Plan offers an interest free credit plan for any one purchase in excess of \$30.

The Plan also provides minor repair services free of charge and major repair service at cost. This service is available to all beneficiaries regardless of where they purchased their hearing aid. Free "loaner" aids are available while aids are being repaired.

Accessories such as cords, receivers and earmolds are sold at cost. Prior to February 1, 1975, hearing aid batteries were available at cost price, but only through the Saskatchewan Hearing Aid Plan Clinics. As a result of numerous requests from hearing aid users to have batteries made available locally, the Plan made arrangements with some pharmacies to handle hearing aid batteries at considerably reduced prices.

On March 31/77, seventy-four pharmacies (mainly in rural areas) were participating in this arrangement.

During this fiscal year, in co-operation with B.P.O. Elks Purple Cross Deaf Detection and Development Program and their auxiliary The Order of the Royal Purple SHAP supplied 28 auditory trainers to hearing impaired pre-school children.

Auditory trainers are specialized systems of amplification that allow wireless communication, by means of radio frequencies, between the parent and the hard of hearing child over a much wider range than available with conventional hearing aids. Such equipment is extremely expensive and without programs such as this, auditory trainers would be inaccessible to the average family. This equipment is essential for the hearing impaired pre-school child if he is to develop speech and language.

## B. NATURE AND SCOPE OF SERVICES

The program offered by the Plan incorporates early detection audiological evaluations, selection and fitting of hearing aids and follow-up of beneficiaries with a hearing impairment. The Plan co-operates with other agencies in providing services to the hearing impaired.

A beneficiary to the Plan may be self referred or referred by a general practitioner, an otologist, a public health nurse or other agencies. Each beneficiary under-goes a thorough audiological evaluation consisting of pure tone testing, speech audiometry, impedance testing and other special testing as required, by qualified audiologists. All cases with medical problems are referred to the family physician or to an otologist. Beneficiaries under eighteen years require medical approval before being fitted with a hearing aid.

On the basis of the audiological evaluation a hearing aid evaluation may be recommended in order to select the most suitable aid. Beneficiaries also receive counselling in the use of their aids.

It is important to assure that beneficiaries obtain maximum benefit from their aids. Experience elsewhere has shown that many aids dispensed either are not worn at all or are in appropriately worn. Because of this observation, regular follow-up procedures have been established for all beneficiaries.

During the year 32 different models of hearing aids were available from six major manufacturers, covering a wide range of features. However, 21 models constituted approximately 70 per cent of sales by volume. The Plan has available an extensive variety of hearing aids to provide the most appropriate hearing aid for the various types of hearing loss, and to satisfy individual consumer preference, aids not carried as a stock item can be special ordered. This greatly increases the number of models SHAP makes available to the residents of the province.

Hearing aids are obtained from both Canadian and foreign companies. These companies are invited to tender according to specifications developed by the Plan.

Each aid has to be accompanied by a performance data sheet from the manufacturer. Spot checks by the Plan's electronics technicians on performance of a sample of each consignment are conducted to ensure maintenance of quality. In addition, each aid is tested for performance when it is dispensed.

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## VI. PROGRAM STATISTICS

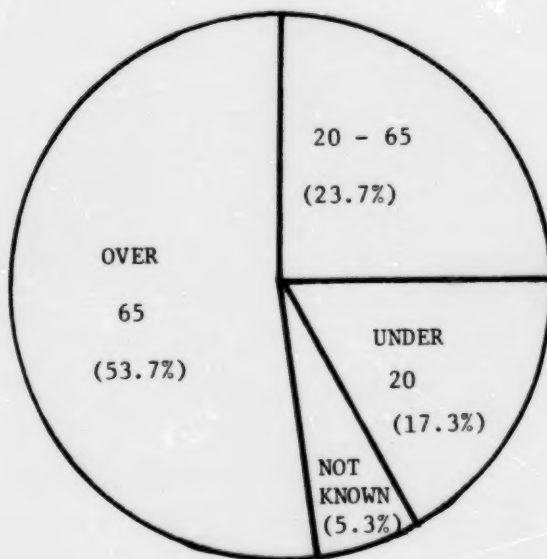
### A. STATISTICAL OVERVIEW

#### NUMBER, AGE & RESIDENCE OF BENEFICIARIES SERVICED BY SHAP

In 1976-77, 8,160 people received services from SHAP. As in previous years, the major portion of persons receiving SHAP services are over the age of 65. In view of the high correlation of age and decrease in hearing acuity, this is not unexpected. The distribution of persons receiving services by age is given in Figure 2.

FIGURE 2

#### DISTRIBUTION OF BENEFICIARIES RECEIVING SERVICES FROM SHAP BY AGE



The actual number of people in each age group is as follows. In the over 65 age group, 4,383 (53.7%) were serviced. The 20 - 65 age group accounted for 1,936 (23.7%) people. Children and adolescents (under 20) numbered 1,414 and accounted for 17.3% of the total number seen. Information as to age was unavailable for 427 of the 8,160 people serviced (5.3%).

## VI. PROGRAM STATISTICS

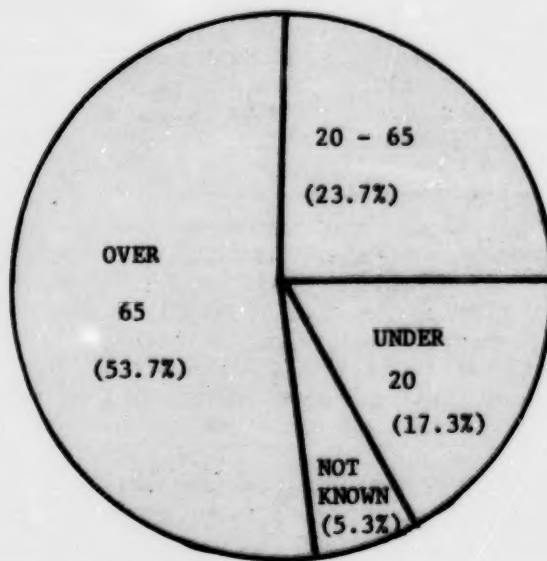
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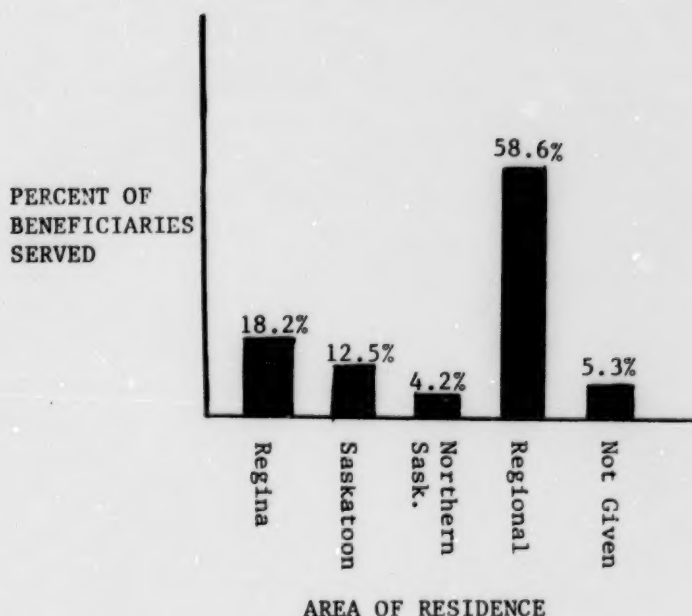


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SHAP stresses provision of services to all residents of Saskatchewan and attempts to provide services throughout the province, not just in the main population centres of Regina and Saskatoon. As can be seen from Figure 3 the vast majority of beneficiaries (62.8%) reside in regions other than Regina or Saskatoon.

FIGURE 3

DISTRIBUTION OF SERVICES TO BENEFICIARIES  
BY AREA OF RESIDENCE



A more precise breakdown of regions of residence is given in Table 1. Both Figure 3 and Table 1 include a small number of persons whose residence was uncertain due to moving or who fell into one of the categories of a qualifying non resident to utilize SHAP services.

SERVICES PROVIDED

For the purpose of analysis, SHAP services are divided into four categories. These categories are Audiological Evaluation, Hearing Aid Evaluation; Repairs and fourth general category labeled "Other" for convenience. This last category includes many follow-up services such as counselling, making of ear molds, adjustments, and loaning of aids. The other categories are self-explanatory.

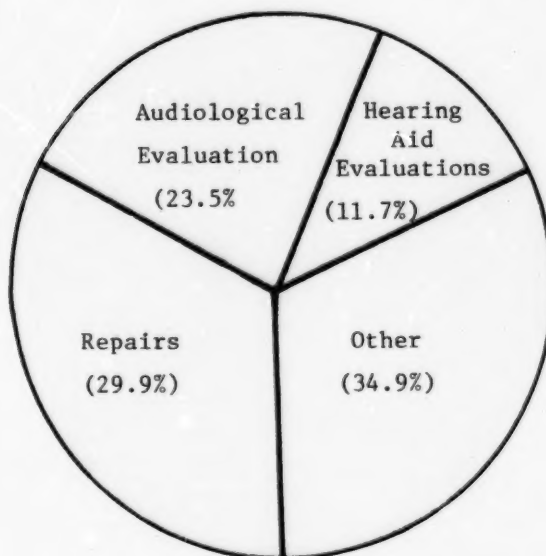


The 8,160 persons seen at SHAP clinics were provided with 20,816 individual services. This number is large but not unexpected when one realizes that there are numerous problems experienced by the first time hearing aid wearer. Frequent counselling and adjustments are necessary before the individual fully adapts to his aid.

The 20,816 services were rather evenly distributed among the four categories. Figure 4 shows that percentage of total services represented by each type of service.

FIGURE 4

TYPE OF SERVICES PROVIDED BY SHAP



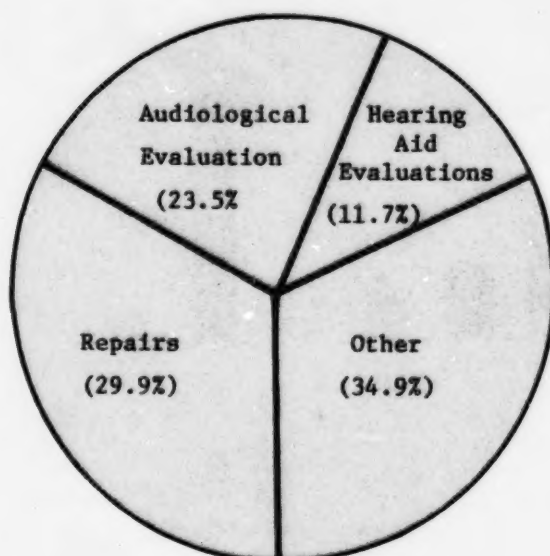
These percentages reflect the following individual services: 4,890 Auditory Evaluations, 2,438 Hearing Aid Evaluations, 6,214 Repairs, and 7,274 Other services. Tables 2 and 3 of the Appendix and Figures 5 and 6 provide information about how services were distributed by geographic regions and by age group.

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FIGURE 5

PROPORTION OF SERVICES  
PROVIDED SHOWN BY AREA  
OF RESIDENCE OF BENE-  
FICIARIES

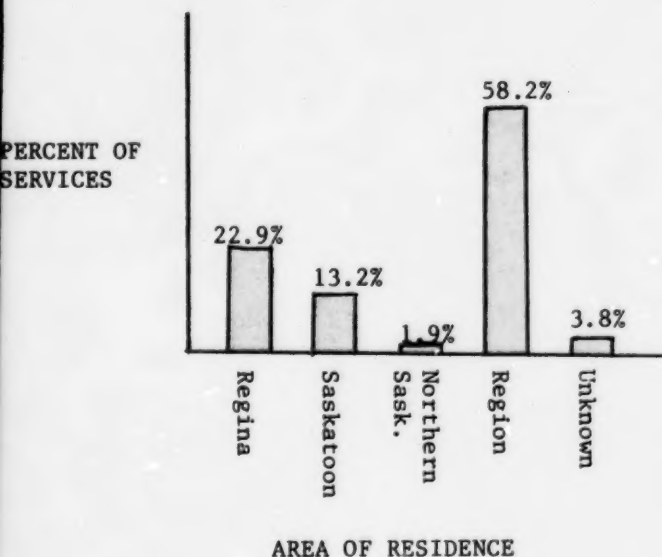
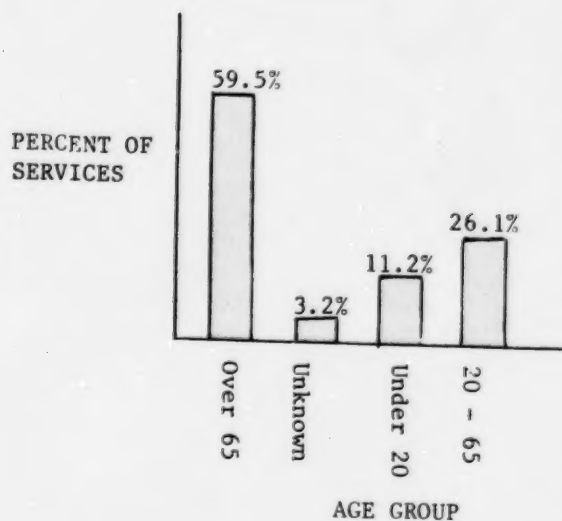


FIGURE 6

PROPORTION OF SERVICES  
PROVIDED TO EACH AGE  
GROUP



As can be seen from the above figures the major portion of services were provided to residents of areas outside of Regina and Saskatoon. They account for 12,108 of the 20,810 or 52.8% of the services provided in 76/77. Regina's 4,762 services account for 22.9% and Saskatoon's 2,752 account for 13.2% of the services provided.

It can also be seen that senior citizens received the majority of the services provided (59.5% or 12,389 of 20,810 services provided).

Several figures relating to services provided should be stressed at this time. The 4,890 people tested in 76/77 represent a negligible increase of 5 from 75/76. The 2,576 hearing aids sold is a gross figure and includes 163 aids returned and 115 aids exchanged. Net sales of 2,298 aids were sold to 2,160 beneficiaries, a decrease of 175 aids from 75/76. This is a 6.8% decrease in sales which is small when viewed against personnel vacancies incurred during much of the year. The 2,160 people buying aids represents a decrease of 313 or 12.6% from 75/76 figures.



Referring back to Figure 4 it can be seen that repairs constitute a sizable portion of SHAP's services. The 6,214 repairs include both repairs to the electronic circuitry and repairs to earmolds and tubing. This figure indicates a sharp increase over previous years. Over half of the 6,214 repairs were electronic repairs. This compares with 2,500 in the preceeding year. A factor explaining this rise is that aids purchased at SHAP's inception are now at the end of their life expectancy.

To lessen the burden of doing without a hearing aid during repairs, 1,283 hearing aids were loaned to beneficiaries during fiscal 76/77.

#### HEARING PROBLEMS

For ease of statistical analysis by computer, a hearing problem was defined as an ear that is not normal. It is highly likely that a large number of people were considered as having two problems, one for each impaired ear. During 76/77, 9,588 hearing impairments were discovered. Figure 7 shows the relative severity of these losses, while Figure 8 shows the type of impairment (see the glossary for definition of terms).

FIGURE 7

DEGREE OF HEARING LOSS

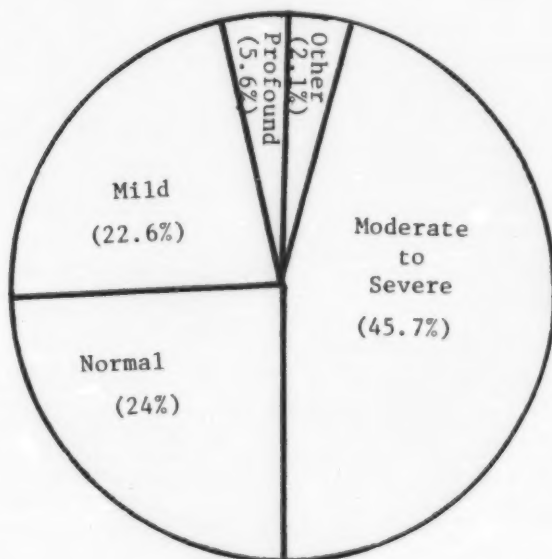
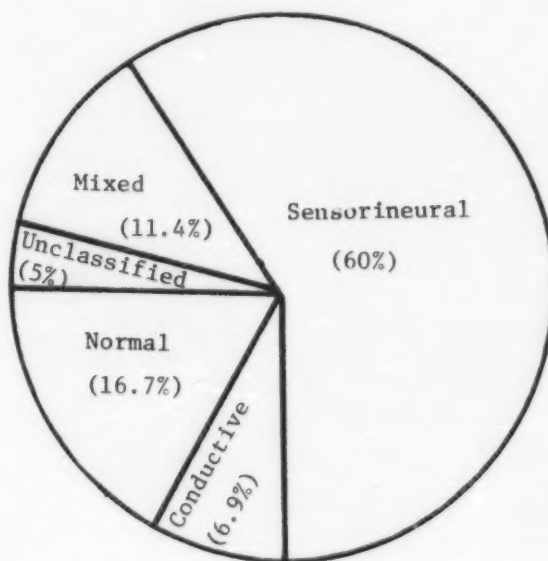


FIGURE 8

TYPE OF HEARING LOSS



Tables 8 and 9 elaborate on this data.

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FIGURE 7

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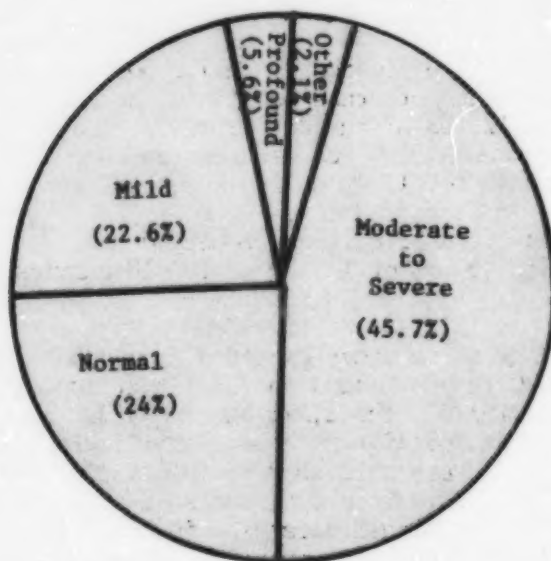
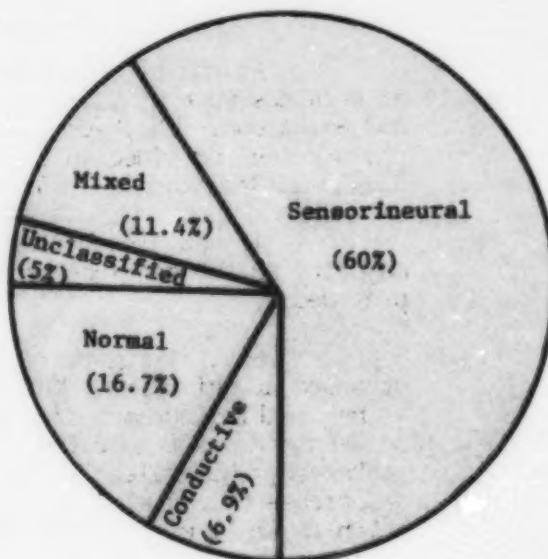


FIGURE 8

TYPE OF HEARING LOSS

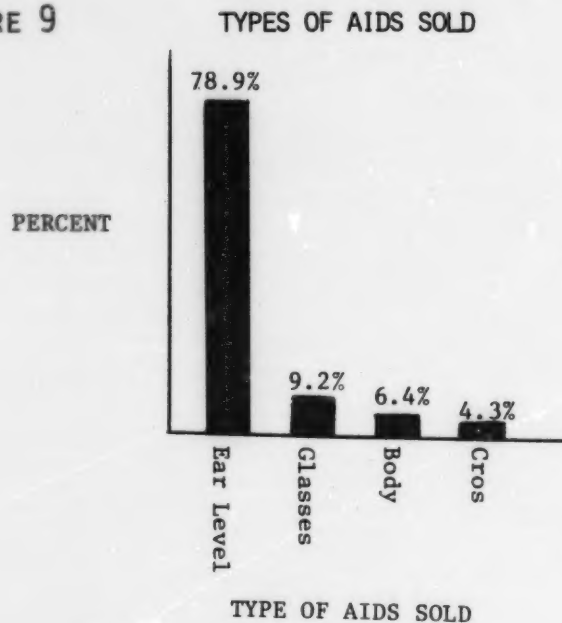


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## AIDS SOLD

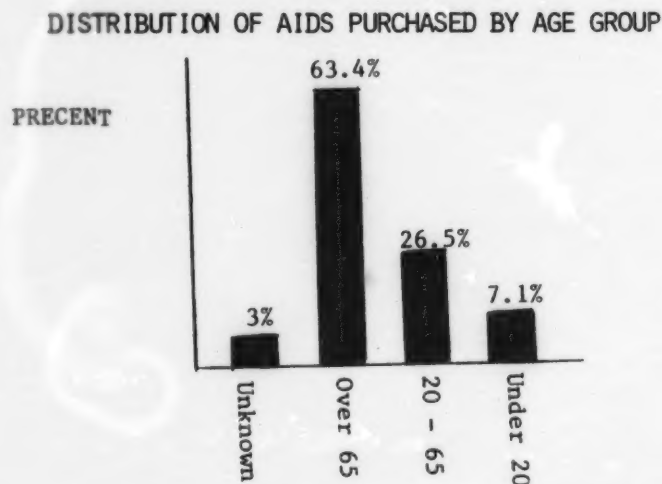
By far the majority of aids sold were of the behind the ear type or ear level aids as they are also known. Figure 9 shows 78.9% of the gross aids sold (2,576) were of this type. The other major types and the percentage of sales represented by each are also given in Figure 9.

FIGURE 9



As in past years, the over 65 age group account for the major portion of aids purchased. Figure 10 shows the distribution of aids sold by age.

FIGURE 10



As can be seen 63.4% of the gross aids sold (1,632) were purchased by beneficiaries over the age of 65.

B. COST OF SERVICES: FINANCIAL ASPECTS OF THE PROGRAM

This section will summarize the cost of fitting an aid and testing individuals who do not purchase aids. A detailed description of the method utilized to obtain these figures is presented in the Financial Statement on pages 22 and 23.

The fitting of hearing aids which includes testing or audiological evaluation, evaluating various aids, counselling and follow-up care accounts for 74.9% of SHAP's time. Of the overhead of \$491,973. \$368,488. or 74.9% is attributed to these services when a hearing aid is purchased. Thus, the 2,438 hearing aid evaluations, which included testing counselling and follow-up care, cost \$151.14 each. This figure does not include the actual cost of the hearing aid. It represents an increase of \$22.49 or 17.4% over last year's cost of \$128.65 per hearing aid fitting.

Hearing aid sales of \$218,540. were reported during the year. The 2,298 net aids were then sold for an average price of \$95.10 each, which is an increase of 78 cents per aid or less than 1% over the previous year.

The total cost of fitting an aid during 76/77 was \$151.14 plus \$95.10 or \$246.24 per aid sold. This is an increase of \$23.27 over last year's figure of \$222.97.

Of SHAP's overhead of \$491,973. \$123,485. or 25.1% was attributed to audiological evaluations when a hearing aid was not purchased. The \$123,485. was distributed over 2,452 evaluations when a hearing aid was not recommended for a cost of \$50.36 per evaluation. This is an increase of \$7.56 or a 17.6% increase over the 75/76 figure of \$42.80.

In summary, the cost of SHAP services increased about 17% over last year.

## C. FINANCIAL STATEMENTS

### STATEMENT OF EXPENSES AND RECONCILIATION TO PUBLIC ACCOUNT OF THE SASKATCHEWAN HEARING AID PLAN FOR THE YEAR ENDED MARCH 31, 1977

| <u>ITEM</u>                                       | <u>1976-77</u>          | <u>1975-76</u>          |
|---------------------------------------------------|-------------------------|-------------------------|
| Contractual services                              | \$ 7,686                | \$ 7,894                |
| Depreciation                                      | 60,252                  | 48,014                  |
| Freight and express                               | 2,185                   | 7,163                   |
| Medical, optical, and allied services             |                         | 326                     |
| Medical supplies                                  | 3                       |                         |
| Miscellaneous materials and supplies              | 752                     | 11                      |
| Postage and communications                        | 10,447                  | 8,950                   |
| Professional and technical services               | 739                     | 6,967                   |
| Publicity, information, advertising, and printing | 3,833                   | 1,892                   |
| Rents, insurance and utility services             | 45                      | 1,116                   |
| Repairs and maintenance                           | 5,248                   | 4,444                   |
| Salaries                                          | 373,276                 | 336,691                 |
| Scientific and educational supplies               | 4,947                   | 4,067                   |
| Stationery and office supplies                    | 999                     | 7,820                   |
| Sundry                                            |                         |                         |
| Taxes and licenses                                |                         |                         |
| Travel, sustenance, and vehicle expenses          | <u>39,469</u>           | <u>32,467</u>           |
| <b>TOTAL:</b>                                     | <b><u>\$509,881</u></b> | <b><u>\$467,822</u></b> |

#### RECONCILIATION TO PUBLIC ACCOUNTS

|                                                   |                         |                          |
|---------------------------------------------------|-------------------------|--------------------------|
| Expenses - Purchases                              | \$281,052               | \$295,066                |
| Expenses per expenditure statement                | 509,881                 | 467,822                  |
| Purchase of fixed assets                          | <u>55,413</u>           | <u>122,634</u>           |
|                                                   | \$846,346               | \$885,522                |
| Less depreciation expense                         | <u>60,252</u>           | <u>48,014</u>            |
|                                                   | \$786,094               | \$837,508                |
| Plus decrease (less increase) in accounts payable | <u>16,035</u>           | <u>(15,068)</u>          |
| <b>TOTAL Expenditures</b>                         | <b><u>\$802,129</u></b> | <b><u>\$822,440*</u></b> |

\* Corresponding figure in Public Accounts and Department of Health Annual Report is \$822,462. The difference of \$22 was incorrectly charged to the SHAP appropriation and was discovered subsequent to the publication of the above reports.

Taken from the 1976-77 financial statements prepared by the Saskatchewan Hearing Aid Plan. The statements are prepared on an accrual basis which takes into consideration accounts receivable, accounts payable and depreciation. The 1975-76 figures are taken from financial statements prepared by Clarkson Gordon and Company.

COST PER HEARING AID SOLD BY THE SASKATCHEWAN HEARING AID PLAN FOR THE YEAR ENDED MARCH 31, 1977

|                                                                                                                                        | 1976-77<br>Total<br>Costs | 1976-77<br>Per Hearing<br>Aid Sold * | 1975-76<br>Total<br>Costs | 1975-76<br>Per Hearing<br>Aid Sold + |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------------|---------------------------|--------------------------------------|
| Hearing aid sales (charges to beneficiaries)                                                                                           |                           |                                      |                           |                                      |
| Overhead expenses related to sale of hearing aids:                                                                                     |                           |                                      |                           |                                      |
| Expenses of Saskatchewan Hearing Aid Plan (Page 21)                                                                                    | \$509,881                 | \$ 95.10                             | \$242,219                 | \$ 94.32                             |
| Add: Rents paid by the Department of Government Services on behalf of the Plan                                                         | 36,756                    |                                      |                           |                                      |
| Total overhead expenses                                                                                                                | <u>\$546,637</u>          |                                      | <u>28,897</u>             |                                      |
| Less: Overhead expenses attributed to accessory sales and repair services (10% of total overhead expenses)                             | <u>\$ 54,664</u>          |                                      | <u>\$496,719</u>          |                                      |
| Total overhead expenses attributed to audiological evaluation, hearing aid fitting and follow-ups                                      | \$491,973                 |                                      | \$ 49,672                 |                                      |
| Less: Overhead expenses attributed to audiological evaluation and follow-ups not related to sale of hearing aids (25.1 of \$491,973)** | \$123,485                 |                                      | \$447,047                 |                                      |
| Total overhead expenses attributed to sale of hearing aids (74.9 of \$491,973)***                                                      | <u>\$368,488</u>          |                                      | <u>++\$ 97,903</u>        |                                      |
| Total expenses attributed to sale of hearing aids                                                                                      | <u>\$587,028</u>          | <u>\$151.14</u>                      | <u>+++ \$349,144</u>      | <u>\$128.65</u>                      |
|                                                                                                                                        |                           | <u>\$246.24</u>                      | <u>\$591,363</u>          | <u>\$222.97</u>                      |

DETAILS OF COST PER HEARING AID SOLD BY THE SASKATCHEWAN HEARING AID PLAN

FOR THE YEAR ENDING MARCH 31, 1977

In order to more accurately reflect the cost of dispensing hearing aids and the cost of providing service for the beneficiaries not receiving a hearing aid, the Plan is calculating costs by using a time factor to provide each type of service, details of which are indicated below:

\* 2,298 hearing aids were sold (net) in 1976-77

An audiological evaluation normally takes one hour. A complete hearing aid evaluation, audiological evaluation and follow-up takes about three hours.

\*\* 2,452 patients (audiological evaluation only) x 1 hour = 2,452 time units or 25.1% of total time (2,452 + 7,314). Average cost for testing beneficiaries not recommended to buy hearing aids was \$50.36 (\$123,485 for 2,452 beneficiaries).

\*\*\* 2,438 hearing aid evaluations, audiological evaluations and follow-up at 3 hours each (includes 278 hearing aids returned for refund and exchange) 2,438 x 3 hours = 7,314 hours or 74.9% of total time (2,452 + 7,314).

1975-76

For comparative purposes, the 1975-76 costs are indicated below:

+ 2,568 hearing aids were sold (net) in 1975-76.

An audiological evaluation normally takes one hour. A complete hearing aid evaluation, audiological evaluation and follow-up takes about three hours.

++ 2,287 patients (audiological evaluation only) x 1 hour = 2,287 time units or 21.9% of total time (2,287 + 8,142). Average cost for testing beneficiaries not recommended to buy hearing aids was \$42.80 (\$97,903 for 2,287 beneficiaries).

+++ 2,568 hearing aid evaluations, audiological evaluations and follow-up + 146 hearing aids returned by patient after dispensing service = 2,714 x 3 hours = 8,142 or 78.1 of total time (2,287 + 8,142).

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**IMPORTANT NOTE CONCERNING THE FOLLOWING  
PAGES**

**THE PAGES WHICH FOLLOW HAVE BEEN FILMED  
TWICE IN ORDER TO OBTAIN THE BEST  
REPRODUCTIVE QUALITY**

**USERS SHOULD CONSULT ALL THE PAGES  
REPRODUCED ON THE FICHE IN ORDER TO OBTAIN  
A COMPLETE READING OF THE TEXT.**

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**REMARQUE IMPORTANTE CONCERNANT LES  
PAGES QUI SUIVENT**

**LES PAGES SUIVANTES ONT ÉTÉ REPRODUITES EN  
DOUBLE AFIN D'AMÉLIORER LA QUALITÉ DE  
REPRODUCTION**

**LES UTILISATEURS DOIVENT CONSULTER TOUTES  
LES PAGES REPRODUITES SUR LA FICHE AFIN  
D'OBTENIR LA LECTURE DU TEXTE INTÉGRAL**

# D. STATISTICAL TABLES

TABLE 1

PEOPLE SERVED, BY AGE AND REGION OF RESIDENCE

| Age                     | 0-6        | 7-19         | 20-44      | 45-64        | 65-74        | 75+          | Not Stated | TOTAL        |
|-------------------------|------------|--------------|------------|--------------|--------------|--------------|------------|--------------|
| Health Region           |            |              |            |              |              |              |            |              |
| # 1 Swift Current       | 1          | 23           | 27         | 66           | 80           | 167          | -          | 364          |
| # 2 Moose Jaw           | 40         | 80           | 48         | 124          | 145          | 341          | 1          | 779          |
| # 3 Weyburn             | 18         | 38           | 26         | 77           | 115          | 269          | -          | 543          |
| # 5 Regina Rural        | 30         | 145          | 38         | 122          | 131          | 253          | -          | 719          |
| # 7 Rosetown            | 4          | 28           | 13         | 55           | 75           | 126          | -          | 301          |
| # 8 Saskatoon Rural     | 9          | 24           | 20         | 54           | 70           | 129          | -          | 306          |
| #10 Yorkton             | 23         | 70           | 31         | 85           | 105          | 159          | 1          | 474          |
| #11 Melfort             | 7          | 40           | 21         | 87           | 110          | 213          | -          | 478          |
| #12 Prince Albert       | 10         | 27           | 19         | 60           | 83           | 128          | -          | 327          |
| #13 North Battleford    | 9          | 56           | 20         | 105          | 107          | 193          | -          | 490          |
| Dept. of Northern Sask. | 46         | 188          | 38         | 51           | 15           | 6            | 1          | 345          |
| Regina City             | 108        | 204          | 141        | 269          | 263          | 498          | -          | 1,483        |
| Saskatoon City          | 30         | 98           | 128        | 179          | 175          | 406          | -          | 1,016        |
| Not Stated              | 6          | 52           | 2          | 30           | 13           | 8            | 424        | 535          |
| <b>TOTAL</b>            | <b>341</b> | <b>1,073</b> | <b>572</b> | <b>1,364</b> | <b>1,487</b> | <b>2,896</b> | <b>427</b> | <b>8,160</b> |

Indicates that beneficiaries over the age of 45 make up the major portion of those people serviced by SHAP.

TABLE 2

## SERVICES RENDERED, BY AGE AND REGION OF RESIDENCE OF CLIENT

| Age                     | 0-6        | 7-19         | 20-44        | 45-64        | 65-74        | 75+          | Not<br>Stated | TOTAL         |
|-------------------------|------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|
| Health Region           |            |              |              |              |              |              |               |               |
| # 1 Swift Current       | 1          | 44           | 104          | 189          | 232          | 451          | -             | 1,021         |
| # 2 Moose Jaw           | 69         | 160          | 130          | 375          | 443          | 1,099        | 12            | 2,288         |
| # 3 Weyburn             | 29         | 102          | 78           | 244          | 324          | 739          | -             | 1,516         |
| # 5 Regina Rural        | 44         | 171          | 106          | 409          | 388          | 827          | -             | 1,945         |
| # 7 Rosetown            | 5          | 44           | 29           | 102          | 161          | 165          | -             | 606           |
| # 8 Saskatoon Rural     | 34         | 45           | 41           | 140          | 186          | 330          | -             | 776           |
| #10 Yorkton             | 31         | 130          | 75           | 203          | 252          | 361          | 1             | 1,053         |
| #11 Melfort             | 7          | 78           | 68           | 181          | 245          | 466          | -             | 1,045         |
| #12 Prince Albert       | 20         | 58           | 48           | 120          | 195          | 276          | -             | 717           |
| #13 North Battleford    | 13         | 107          | 40           | 226          | 311          | 444          | -             | 1,141         |
| Dept. of Northern Sask. | 50         | 204          | 51           | 62           | 24           | 9            | 1             | 401           |
| Regina City             | 170        | 358          | 455          | 1,046        | 967          | 1,766        | -             | 4,762         |
| Saskatoon City          | 63         | 224          | 324          | 542          | 480          | 1,119        | -             | 2,752         |
| Not Stated              | 7          | 57           | 2            | 42           | 17           | 12           | 656           | 793           |
| <b>TOTAL</b>            | <b>543</b> | <b>1,782</b> | <b>1,551</b> | <b>3,881</b> | <b>4,325</b> | <b>8,164</b> | <b>670</b>    | <b>20,816</b> |

This indicates that services provided were distributed throughout all regions.

# D. STATISTICAL TABLES

## TABLE 1

PEOPLE SERVED, BY AGE AND REGION OF RESIDENCE

| Age                     | 0-6 | 7-19  | 20-44 | 45-64 | 65-74 | 75+   | Not Stated | TOTAL |
|-------------------------|-----|-------|-------|-------|-------|-------|------------|-------|
| Health Region           |     |       |       |       |       |       |            |       |
| # 1 Swift Current       | 1   | 23    | 27    | 66    | 80    | 167   | -          | 364   |
| # 2 Moose Jaw           | 40  | 80    | 48    | 124   | 145   | 341   | 1          | 779   |
| # 3 Weyburn             | 18  | 38    | 26    | 77    | 115   | 269   | -          | 543   |
| # 5 Regina Rural        | 30  | 145   | 38    | 122   | 131   | 253   | -          | 719   |
| # 7 Rosetown            | 4   | 28    | 13    | 55    | 75    | 126   | -          | 301   |
| # 8 Saskatoon Rural     | 9   | 24    | 20    | 54    | 70    | 129   | -          | 306   |
| #10 Yorkton             | 23  | 70    | 31    | 85    | 105   | 159   | 1          | 474   |
| #11 Melfort             | 7   | 40    | 21    | 87    | 110   | 213   | -          | 478   |
| #12 Prince Albert       | 10  | 27    | 19    | 60    | 83    | 128   | -          | 327   |
| #13 North Battleford    | 9   | 56    | 20    | 105   | 107   | 193   | -          | 490   |
| Dept. of Northern Sask. | 46  | 188   | 38    | 51    | 15    | 6     | 1          | 345   |
| Regina City             | 108 | 204   | 141   | 269   | 263   | 498   | -          | 1,483 |
| Saskatoon City          | 30  | 98    | 128   | 179   | 175   | 406   | -          | 1,016 |
| Not Stated              | 6   | 52    | 2     | 30    | 13    | 8     | 424        | 535   |
| TOTAL                   | 341 | 1,073 | 572   | 1,364 | 1,487 | 2,896 | 427        | 8,160 |

Indicates that beneficiaries over the age of 45 make up the major portion of those people serviced by SHAP.

TABLE 2

## SERVICES RENDERED, BY AGE AND REGION OF RESIDENCE OF CLIENT

| Age                     | 0-6 | 7-19  | 20-44 | 45-64 | 65-74 | 75+   | Not<br>Stated | TOTAL  |
|-------------------------|-----|-------|-------|-------|-------|-------|---------------|--------|
| Health Region           |     |       |       |       |       |       |               |        |
| # 1 Swift Current       | 1   | 44    | 104   | 189   | 232   | 451   | -             | 1,021  |
| # 2 Moose Jaw           | 69  | 160   | 130   | 375   | 443   | 1,099 | 12            | 2,288  |
| # 3 Weyburn             | 29  | 102   | 78    | 244   | 324   | 739   | -             | 1,516  |
| # 5 Regina Rural        | 44  | 171   | 106   | 409   | 388   | 827   | -             | 1,945  |
| # 7 Rosetown            | 5   | 44    | 29    | 102   | 161   | 165   | -             | 606    |
| # 8 Saskatoon Rural     | 34  | 45    | 41    | 140   | 186   | 330   | -             | 776    |
| #10 Yorkton             | 31  | 130   | 75    | 203   | 252   | 361   | 1             | 1,053  |
| #11 Melfort             | 7   | 78    | 68    | 181   | 245   | 466   | -             | 1,045  |
| #12 Prince Albert       | 20  | 58    | 48    | 120   | 195   | 276   | -             | 717    |
| #13 North Battleford    | 13  | 107   | 40    | 226   | 311   | 444   | -             | 1,141  |
| Dept. of Northern Sask. | 50  | 204   | 51    | 62    | 24    | 9     | 1             | 401    |
| Regina City             | 170 | 358   | 455   | 1,046 | 967   | 1,766 | -             | 4,762  |
| Saskatoon City          | 63  | 224   | 324   | 542   | 480   | 1,119 | -             | 2,752  |
| Not Stated              | 7   | 57    | 2     | 42    | 17    | 12    | 656           | 793    |
| TOTAL                   | 543 | 1,782 | 1,551 | 3,881 | 4,325 | 8,164 | 670           | 20,816 |

This indicates that services provided were distributed throughout all regions.

TABLE 3

## SERVICES RENDERED, BY AGE OF PERSON AND TYPE OF SERVICE

| Type  | AE <sup>1</sup> | HAE <sup>2</sup> | REPAIR | OTHER | TOTAL  |
|-------|-----------------|------------------|--------|-------|--------|
| Age   |                 |                  |        |       |        |
| 0-6   | 353             | 22               | 46     | 122   | 543    |
| 7-19  | 978             | 119              | 268    | 417   | 1,782  |
| 20-44 | 348             | 175              | 458    | 570   | 1,551  |
| 45-64 | 791             | 471              | 1,220  | 1,399 | 3,881  |
| 65-74 | 841             | 586              | 1,318  | 1,480 | 4,225  |
| 75+   | 1,551           | 999              | 2,672  | 2,942 | 8,164  |
| N.S.  | 28              | 66               | 232    | 344   | 670    |
| TOTAL | 4,890           | 2,438            | 6,214  | 7,274 | 20,816 |

Shows that beneficiaries over the age of 45 are in greater need of audiological testing, hearing aid evaluations, repairs, and especially follow-up care.

1. AE = Audiological Evaluation

2. HAE = Hearing Aid Evaluation

TABLE 4

## SERVICES RENDERED, BY REGION OF RESIDENCE AND TYPE OF SERVICE

| Type                    | AE    | HAE   | REPAIRS | OTHER | TOTAL  |
|-------------------------|-------|-------|---------|-------|--------|
| Health Region           |       |       |         |       |        |
| # 1 Swift Current       | 192   | 133   | 330     | 366   | 1,021  |
| # 2 Moose Jaw           | 477   | 291   | 540     | 980   | 2,288  |
| # 3 Weyburn             | 366   | 177   | 335     | 638   | 1,516  |
| # 5 Regina Rural        | 462   | 223   | 513     | 747   | 1,945  |
| # 7 Rosetown            | 178   | 84    | 210     | 134   | 606    |
| # 8 Saskatoon Rural     | 183   | 93    | 281     | 219   | 776    |
| #10 Yorkton             | 282   | 152   | 287     | 332   | 1,053  |
| #11 Melfort             | 314   | 184   | 290     | 257   | 1,045  |
| #12 Prince Albert       | 221   | 140   | 185     | 171   | 717    |
| #13 North Battleford    | 313   | 181   | 312     | 335   | 1,141  |
| Dept. of Northern Sask. | 335   | 26    | 22      | 18    | 401    |
| Regina City             | 865   | 372   | 1,508   | 2,017 | 4,762  |
| Saskatoon City          | 571   | 283   | 1,165   | 733   | 2,752  |
| Not Stated              | 131   | 99    | 236     | 327   | 793    |
| TOTAL                   | 4,890 | 2,438 | 6,214   | 7,274 | 20,816 |

Indicates that the various services offered by SHAP are provided to all areas of the province.

TABLE 3  
SERVICES RENDERED, BY AGE OF PERSON AND TYPE OF SERVICE

| Type  | AE 1  | HAE 2 | REPAIR | OTHER | TOTAL  |
|-------|-------|-------|--------|-------|--------|
| Age   |       |       |        |       | 543    |
| 0-6   | 353   | 22    | 46     | 122   | 1,782  |
| 7-19  | 978   | 119   | 268    | 417   | 1,551  |
| 20-44 | 348   | 175   | 458    | 570   | 3,881  |
| 45-64 | 791   | 471   | 1,220  | 1,399 | 4,225  |
| 65-74 | 841   | 586   | 1,318  | 1,480 | 8,164  |
| 75+   | 1,551 | 999   | 2,672  | 2,942 | 670    |
| N.S.  | 28    | 66    | 232    | 344   |        |
| TOTAL | 4,890 | 2,438 | 6,214  | 7,274 | 20,816 |

Shows that beneficiaries over the age of 45 are in greater need of audiological testing, hearing aid evaluations, repairs, and especially follow-up care.

1. AE = Audiological Evaluation
2. HAE = Hearing Aid Evaluation

TABLE 4

## SERVICES RENDERED, BY REGION OF RESIDENCE AND TYPE OF SERVICE

| Type                    | AE    | HAE   | REPAIRS | OTHER | TOTAL  |
|-------------------------|-------|-------|---------|-------|--------|
| Health Region           |       |       |         |       |        |
| # 1 Swift Current       | 192   | 133   | 330     | 366   | 1,021  |
| # 2 Moose Jaw           | 477   | 291   | 540     | 980   | 2,288  |
| # 3 Weyburn             | 366   | 177   | 335     | 638   | 1,516  |
| # 5 Regina Rural        | 462   | 223   | 513     | 747   | 1,945  |
| # 7 Rosetown            | 178   | 84    | 210     | 134   | 606    |
| # 8 Saskatoon Rural     | 183   | 93    | 281     | 219   | 776    |
| #10 Yorkton             | 282   | 152   | 287     | 332   | 1,053  |
| #11 Melfort             | 314   | 184   | 290     | 257   | 1,045  |
| #12 Prince Albert       | 221   | 140   | 185     | 171   | 717    |
| #13 North Battleford    | 313   | 181   | 312     | 335   | 1,141  |
| Dept. of Northern Sask. | 335   | 26    | 22      | 18    | 401    |
| Regina City             | 865   | 372   | 1,508   | 2,017 | 4,762  |
| Saskatoon City          | 571   | 283   | 1,165   | 733   | 2,752  |
| Not Stated              | 131   | 99    | 236     | 327   | 793    |
| TOTAL                   | 4,890 | 2,438 | 6,214   | 7,274 | 20,816 |

Indicates that the various services offered by SHAP are provided to all areas of the province.

TABLE 5

## AIDS SOLD, GROSS, BY AGE AND REGION OF RESIDENCE OF CLIENT

| Age                     | 0-6       | 7-19       | 20-44      | 45-64      | 65-74      | 75+          | Not<br>Stated | TOTAL        |
|-------------------------|-----------|------------|------------|------------|------------|--------------|---------------|--------------|
| Health Region           |           |            |            |            |            |              |               |              |
| # 1 Swift Current       | -         | 4          | 16         | 34         | 31         | 53           | -             | 138          |
| # 2 Moose Jaw           | 5         | 11         | 17         | 44         | 71         | 153          | -             | 301          |
| # 3 Weyburn             | 1         | 11         | 11         | 30         | 43         | 86           | -             | 182          |
| # 5 Regina City         | -         | 9          | 17         | 45         | 54         | 106          | -             | 231          |
| # 7 Rosetown            | -         | 3          | 3          | 14         | 27         | 41           | -             | 88           |
| # 8 Saskatoon City      | 2         | 4          | 7          | 16         | 24         | 47           | -             | 100          |
| #10 Yorkton             | 1         | 10         | 10         | 39         | 43         | 55           | -             | 158          |
| #11 Melfort             | 1         | 8          | 13         | 27         | 53         | 91           | -             | 193          |
| #12 Prince Albert       | 5         | 11         | 8          | 23         | 42         | 68           | -             | 157          |
| #13 North Battleford    | 2         | 19         | 5          | 35         | 57         | 74           | -             | 192          |
| Dept. of Northern Sask. | 2         | 6          | 4          | 10         | 3          | 2            | -             | 27           |
| Regina City             | 5         | 24         | 44         | 91         | 93         | 131          | -             | 388          |
| Saskatoon City          | 4         | 28         | 36         | 65         | 56         | 118          | -             | 307          |
| Not Stated              | 1         | 6          | 1          | 18         | 7          | 3            | 78            | 114          |
| <b>TOTAL</b>            | <b>29</b> | <b>154</b> | <b>192</b> | <b>491</b> | <b>604</b> | <b>1,028</b> | <b>78</b>     | <b>2,576</b> |

Reflects that over half the aids purchased were purchased by beneficiaries over the age of 65.

TABLE 6

## AIDS SOLD, GROSS, BY AGE OF PERSON AND TYPE OF AID

| Type  | Ear Level | Glasses | Body | Cros | Iros | Bicros | Bone | Conduction | Other | TOTAL |
|-------|-----------|---------|------|------|------|--------|------|------------|-------|-------|
| Age   |           |         |      |      |      |        |      |            |       |       |
| 0-6   | 13        | 6       | 10   | -    | -    | -      | -    | -          | -     | 29    |
| 7-19  | 124       | 3       | 23   | 1    | -    | 1      | 2    | -          | -     | 154   |
| 20-44 | 160       | 8       | 13   | 7    | 1    | 1      | 1    | 1          | 1     | 192   |
| 45-64 | 364       | 55      | 19   | 25   | 1    | 19     | 6    | 2          | 2     | 491   |
| 65-74 | 493       | 62      | 16   | 11   | -    | 14     | 5    | 3          | 3     | 604   |
| 75+   | 822       | 92      | 80   | 10   | -    | 14     | 5    | 5          | 5     | 1,028 |
| N.S.  | 56        | 12      | 5    | 2    | -    | 3      | -    | -          | -     | 78    |
| TOTAL | 2,032     | 238     | 166  | 56   | 2    | 52     | 19   | 11         | 11    | 2,576 |

Shows ear level aids account for almost 80% of all aids sold regardless of age.

TABLE 5

## AIDS SOLD, GROSS, BY AGE AND REGION OF RESIDENCE OF CLIENT

| Age                     | 0-6       | 7-19       | 20-44      | 45-64      | 65-74      | 75+          | Not<br>Stated | TOTAL        |
|-------------------------|-----------|------------|------------|------------|------------|--------------|---------------|--------------|
| Health Region           |           |            |            |            |            |              |               |              |
| # 1 Swift Current       | -         | 4          | 16         | 34         | 31         | 53           | -             | 138          |
| # 2 Moose Jaw           | 5         | 11         | 17         | 44         | 71         | 153          | -             | 301          |
| # 3 Weyburn             | 1         | 11         | 11         | 30         | 43         | 86           | -             | 182          |
| # 5 Regina City         | -         | 9          | 17         | 45         | 54         | 106          | -             | 231          |
| # 7 Rosetown            | -         | 3          | 3          | 14         | 27         | 41           | -             | 88           |
| # 8 Saskatoon City      | 2         | 4          | 7          | 16         | 24         | 47           | -             | 100          |
| #10 Yorkton             | 1         | 10         | 10         | 39         | 43         | 55           | -             | 158          |
| #11 Melfort             | 1         | 8          | 13         | 27         | 53         | 91           | -             | 193          |
| #12 Prince Albert       | 5         | 11         | 8          | 23         | 42         | 68           | -             | 157          |
| #13 North Battleford    | 2         | 19         | 5          | 35         | 57         | 74           | -             | 192          |
| Dept. of Northern Sask. | 2         | 6          | 4          | 10         | 3          | 2            | -             | 27           |
| Regina City             | 5         | 24         | 44         | 91         | 93         | 131          | -             | 388          |
| Saskatoon City          | 4         | 28         | 36         | 65         | 56         | 118          | -             | 307          |
| Not Stated              | 1         | 6          | 1          | 18         | 7          | 3            | 78            | 114          |
| <b>TOTAL</b>            | <b>29</b> | <b>154</b> | <b>192</b> | <b>491</b> | <b>604</b> | <b>1,028</b> | <b>78</b>     | <b>2,576</b> |

Reflects that over half the aids purchased were purchased by beneficiaries over the age of 65.

TABLE 6

## AIDS SOLD, GROSS, BY AGE OF PERSON AND TYPE OF AID

| Type  | Ear Level | Glasses | Body | Cros | Iros | Bicros | Bone Conduction | Other | TOTAL |
|-------|-----------|---------|------|------|------|--------|-----------------|-------|-------|
| Age   | 13        | 6       | 10   | -    | -    | -      | -               | -     | 29    |
| 0-6   | 124       | 3       | 23   | 1    | 1    | 1      | 2               | -     | 154   |
| 7-19  | 160       | 8       | 13   | 7    | 1    | 1      | 1               | 1     | 192   |
| 20-44 | 364       | 55      | 19   | 25   | 1    | 19     | 6               | 2     | 491   |
| 45-64 | 493       | 62      | 16   | 11   | -    | 14     | 5               | 3     | 604   |
| 65-74 | 822       | 92      | 80   | 10   | -    | 14     | 5               | 5     | 1,028 |
| 75+   | 56        | 12      | 5    | 2    | -    | 3      | -               | -     | 78    |
| N.S.  |           |         |      |      |      |        |                 |       |       |
| TOTAL | 2,032     | 238     | 166  | 56   | 2    | 52     | 19              | 11    | 2,576 |

Shows ear level aids account for almost 80% of all aids sold regardless of age.

TABLE 7

## AIDS SOLD, GROSS, BY RESIDENCE OF PERSON AND TYPE OF AID

| Type                    | Ear Level | Glasses | Body | Cros | Iros | Bicros | Bone Conduction | Other | TOTAL |
|-------------------------|-----------|---------|------|------|------|--------|-----------------|-------|-------|
| Health Region           |           |         |      |      |      |        |                 |       |       |
| # 1 Swift Current       | 120       | 7       | 6    | 3    | -    | -      | 1               | 1     | 138   |
| # 2 Moose Jaw           | 228       | 35      | 28   | 2    | -    | 7      | -               | 1     | 301   |
| # 3 Weyburn             | 149       | 12      | 15   | 1    | -    | 1      | 1               | 3     | 182   |
| # 5 Regina Rural        | 182       | 23      | 10   | 8    | -    | 5      | 2               | 1     | 231   |
| # 7 Rosetown            | 71        | 12      | -    | 1    | -    | 1      | 2               | 1     | 88    |
| # 8 Saskatoon Rural     | 80        | 11      | 5    | 2    | -    | 1      | -               | 1     | 100   |
| #10 Yorkton             | 134       | 9       | 11   | 1    | -    | 2      | 1               | -     | 158   |
| #11 Melfort             | 160       | 16      | 9    | 3    | -    | 5      | -               | -     | 193   |
| #12 Prince Albert       | 116       | 22      | 11   | 1    | -    | 5      | 2               | -     | 157   |
| #13 North Battleford    | 165       | 9       | 9    | 6    | 1    | 1      | 1               | -     | 192   |
| Dept. of Northern Sask. | 22        | -       | 4    | 1    | -    | -      | -               | -     | 27    |
| Regina City             | 280       | 40      | 32   | 14   | 1    | 14     | 4               | 3     | 388   |
| Saskatoon City          | 239       | 27      | 19   | 11   | -    | 6      | 5               | -     | 307   |
| Not Stated              | 86        | 15      | 7    | 2    | -    | 4      | -               | -     | 114   |
| TOTAL                   | 2,032     | 238     | 116  | 56   | 2    | 52     | 19              | 11    | 2,576 |

Indicates ear level aids were the most frequently recommended type in all geographic areas.

TABLE 8

## HEARING PROBLEMS FOUND BY DEGREE AND TYPE OF LOSS

| Type              | Normal | Conductive | Sensorineural | Mixed | Unknown | Not tested | TOTAL |
|-------------------|--------|------------|---------------|-------|---------|------------|-------|
| Degree            |        |            |               |       |         |            |       |
| Normal            | 1,597  | 241        | 394           | 18    | 49      | 1          | 2,299 |
| Mild              | 2      | 255        | 1,731         | 149   | 33      | -          | 2,170 |
| Moderate          | -      | 101        | 1,964         | 277   | 36      | -          | 2,378 |
| Moderately Severe | -      | 28         | 902           | 263   | 50      | -          | 1,243 |
| Severe            | -      | 18         | 426           | 256   | 63      | -          | 763   |
| Profound          | -      | 5          | 332           | 126   | 70      | -          | 533   |
| Not tested        | 2      | 10         | 2             | -     | 188     | 1          | 202   |
| TOTAL             | 1,601  | 658        | 5,751         | 1,089 | 489     | 2          | 9,588 |

Shows that the majority of hearing losses were sensorineural and were predominantly mild or moderate.

TABLE 7

## AIDS SOLD, GROSS, BY RESIDENCE OF PERSON AND TYPE OF AID

| Type                    | Ear Level    | Glasses    | Body       | Cros      | Iros     | Bicros    | Bone Conduction | Other     | TOTAL        |
|-------------------------|--------------|------------|------------|-----------|----------|-----------|-----------------|-----------|--------------|
| Health Region           |              |            |            |           |          |           |                 |           |              |
| # 1 Swift Current       | 120          | 7          | 6          | 3         | -        | -         | 1               | 1         | 138          |
| # 2 Moose Jaw           | 228          | 35         | 28         | 2         | -        | 7         | -               | 1         | 301          |
| # 3 Weyburn             | 149          | 12         | 15         | 1         | -        | 1         | 1               | 3         | 182          |
| # 5 Regina Rural        | 182          | 23         | 10         | 8         | -        | 5         | 2               | 1         | 231          |
| # 7 Rosetown            | 71           | 12         | -          | 1         | -        | 1         | 2               | 1         | 88           |
| # 8 Saskatoon Rural     | 80           | 11         | 5          | 2         | -        | 1         | -               | 1         | 100          |
| #10 Yorkton             | 134          | 9          | 11         | 1         | -        | 2         | 1               | -         | 158          |
| #11 Melfort             | 160          | 16         | 9          | 3         | -        | 5         | -               | -         | 193          |
| #12 Prince Albert       | 116          | 22         | 11         | 1         | -        | 5         | 2               | -         | 157          |
| #13 North Battleford    | 165          | 9          | 9          | 6         | 1        | 1         | 1               | -         | 192          |
| Dept. of Northern Sask. | 22           | -          | 4          | 1         | -        | -         | -               | -         | 27           |
| Regina City             | 280          | 40         | 32         | 14        | 1        | 14        | 4               | 3         | 388          |
| Saskatoon City          | 239          | 27         | 19         | 11        | -        | 6         | 5               | -         | 307          |
| Not Stated              | 86           | 15         | 7          | 2         | -        | 4         | -               | -         | 114          |
| <b>TOTAL</b>            | <b>2,032</b> | <b>238</b> | <b>116</b> | <b>56</b> | <b>2</b> | <b>52</b> | <b>19</b>       | <b>11</b> | <b>2,576</b> |

Indicates ear level aids were the most frequently recommended type in all geographic areas.

TABLE 8  
HEARING PROBLEMS FOUND BY DEGREE AND TYPE OF LOSS

| Type              | Normal | Conductive | Sensorineural | Mixed | Unknown | Not tested | TOTAL |
|-------------------|--------|------------|---------------|-------|---------|------------|-------|
| Degree            |        |            |               |       |         |            |       |
| Normal            | 1,597  | 241        | 394           | 18    | 49      | 1          | 2,299 |
| Mild              | 2      | 255        | 1,731         | 149   | 33      | -          | 2,170 |
| Moderate          | -      | 101        | 1,964         | 277   | 36      | -          | 2,378 |
| Moderately Severe | -      | 28         | 902           | 263   | 50      | -          | 1,243 |
| Severe            | -      | 18         | 426           | 256   | 63      | -          | 763   |
| Profound          | -      | 5          | 332           | 126   | 70      | -          | 533   |
| Not tested        | 2      | 10         | 2             | -     | 188     | 1          | 202   |
| TOTAL             | 1,601  | 658        | 5,751         | 1,089 | 489     | 2          | 9,588 |

Shows that the majority of hearing losses were sensorineural and were predominantly mild or moderate.



TABLE 9

## HEARING PROBLEMS FOUND, BY TYPE OF PROBLEM AND RESIDENCE OF CLIENT

| Type                    | Normal | Conductive | Sensorineural | Mixed | Unknown | Not Tested | TOTAL |
|-------------------------|--------|------------|---------------|-------|---------|------------|-------|
| # 1 Swift Current       | 22     | 16         | 273           | 54    | 13      | -          | 378   |
| # 2 Moose Jaw           | 147    | 46         | 585           | 82    | 62      | -          | 922   |
| # 3 Weyburn             | 42     | 29         | 535           | 68    | 46      | -          | 720   |
| # 5 Regina Rural        | 187    | 113        | 472           | 100   | 40      | -          | 912   |
| # 7 Rosetown            | 25     | 13         | 259           | 43    | 14      | -          | 354   |
| # 8 Saskatoon Rural     | 24     | 4          | 280           | 41    | 9       | -          | 358   |
| #10 Yorkton             | 70     | 58         | 314           | 74    | 35      | -          | 551   |
| #11 Melfort             | 38     | 24         | 444           | 97    | 23      | -          | 626   |
| #12 Prince Albert       | 18     | 6          | 330           | 65    | 18      | -          | 437   |
| #13 North Battleford    | 79     | 26         | 414           | 76    | 28      | -          | 623   |
| Dept. of Northern Sask. | 385    | 82         | 113           | 39    | 32      | -          | 651   |
| Regina City             | 352    | 185        | 838           | 195   | 106     | -          | 1,676 |
| Saskatoon City          | 123    | 31         | 771           | 141   | 51      | -          | 1,117 |
| Not Stated              | 89     | 25         | 123           | 14    | 12      | -          | 263   |
| TOTAL                   | 1,601  | 658        | 5,751         | 1,089 | 489     | -          | 9,588 |

Confirms a lack of correlation between type of loss and geographical area.

TABLE 9

## HEARING PROBLEMS FOUND, BY TYPE OF PROBLEM AND RESIDENCE OF CLIENT

| Type                    | Normal       | Conductive | Sensorineural | Mixed        | Unknown    | Not Tested | TOTAL        |
|-------------------------|--------------|------------|---------------|--------------|------------|------------|--------------|
| # 1 Swift Current       | 22           | 16         | 273           | 54           | 13         | -          | 378          |
| # 2 Moose Jaw           | 147          | 46         | 585           | 82           | 62         | -          | 922          |
| # 3 Weyburn             | 42           | 29         | 535           | 68           | 46         | -          | 720          |
| # 5 Regina Rural        | 187          | 113        | 472           | 100          | 40         | -          | 912          |
| # 7 Rosetown            | 25           | 13         | 259           | 43           | 14         | -          | 354          |
| # 8 Saskatoon Rural     | 24           | 4          | 280           | 41           | 9          | -          | 358          |
| #10 Yorkton             | 70           | 58         | 314           | 74           | 35         | -          | 551          |
| #11 Melfort             | 38           | 24         | 444           | 97           | 23         | -          | 626          |
| #12 Prince Albert       | 18           | 6          | 330           | 65           | 18         | -          | 437          |
| #13 North Battleford    | 79           | 26         | 414           | 76           | 28         | -          | 623          |
| Dept. of Northern Sask. | 385          | 82         | 113           | 39           | 32         | -          | 651          |
| Regina City             | 352          | 185        | 838           | 195          | 106        | -          | 1,676        |
| Saskatoon City          | 123          | 31         | 771           | 141          | 51         | -          | 1,117        |
| Not Stated              | 89           | 25         | 123           | 14           | 12         | -          | 263          |
| <b>TOTAL</b>            | <b>1,601</b> | <b>658</b> | <b>5,751</b>  | <b>1,089</b> | <b>489</b> | <b>-</b>   | <b>9,588</b> |

Confirms a lack of correlation between type of loss and geographical area.

## VII. GLOSSARY OF TERMS

- Audiologist** - A person with highly specialized training in the assessment and rehabilitation of persons with impaired hearing.
- Audiological Evaluation** - A battery of tests to determine a person's hearing acuity for various sounds and speech. The battery may include site of lesion tests to determine where the problem lies within the auditory system.
- Hearing Aid Evaluation** - A battery of tests designed to determine hearing aid performance and the benefit the patient would be expected to receive by wearing the aid.
- Normal Hearing** - Thresholds better than the 25dB accepted standard.
- Conductive Loss** - A hearing loss due to a problem in the system that transfers sound from the environment to the inner ear. Typical conductive lesions found in the middle ear are otosclerosis, lesion of the tympanic membrane, and traumatic injury of the tiny bones of the middle ear.
- Sensorineural Hearing Loss** - Is caused by damage within the cochlea or inner ear. It involves damage to the sensory cells and in most cases cannot be corrected medically. Typical losses of this type result from the aging process and noise exposure. Certain disease processes, head trauma, toxic agents, etc. can also cause sensorineural loss.
- Mixed Loss** - Has both conductive and sensorineural components.
- Earmold** - A "plug type" device that is custom made to fit the individual ear. It serves the function of coupling the aid to the ear canal.

|                                 |                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Behind the Ear or Ear Level Aid | - Usually about 2 or 3 inches long it rests behind the ear and connects to the ear mold via a hook type arrangement which rests over the top of the ear.                                                                                                                                                                                                                                      |
| Body aid                        | - Usually worn in the pocket, it is connected to the earmold via a wire. These aids tend to be the most powerful.                                                                                                                                                                                                                                                                             |
| Glasses Aid                     | - Are built into the temple pieces of a pair of glasses.                                                                                                                                                                                                                                                                                                                                      |
| In the Ear Aids                 | - Fit in the ear canal: they are the least powerful and most prone to fitting problems of any aid.                                                                                                                                                                                                                                                                                            |
| Bone Conductor Aid              | - Refers to stimulating the cochlea directly via the mastoid process. A Bone Conductor aid would have a mechanical vibrator worn on the mastoid (bone behind the ear) which vibrates and stimulates the cochlea without the middle ear being involved. Such aids are only used in ears that are actively infected and secreting fluid.                                                        |
| dB                              | - is the abbreviation for decibel: because the range of sensitivity of the inner ear is so large (the loudest sound we can tolerate is millions of times more powerful than the softest we can hear), a scale based upon logarithms was devised. The scale runs approximately from the softest sounds (about 0dB) to 140dB at the maximum. The reference point for the dB scale is arbitrary. |
| Repair (Major)                  | - Repair of the electronic components of a hearing aid.                                                                                                                                                                                                                                                                                                                                       |
| Repair (Minor)                  | - Repair to non-electronic components of a hearing aid and to auxillary equipment (ei. ear molds, tubing).                                                                                                                                                                                                                                                                                    |
| Mild Loss                       | - Greater than 20dB and less than 40dB for frequencies important for understanding speech.                                                                                                                                                                                                                                                                                                    |

**Moderate Loss**

- Greater than 40dB and less than 70dB for frequencies important for the understanding of speech.

**Severe Loss**

- Greater than 70dB but less than 90dB for frequencies important for the understanding of speech.

**Profound Loss**

- Greater than 90dB for frequencies important for understanding speech.

### VIII. ADDENDUM

This Saskatchewan Hearing Aid Plan annual report was prepared subsequent to the annual report of the Department of Health. In both reports the most up-to-date information available at the time of publication was presented. Additional data for the fiscal year became available just prior to publication of this document, and as a result, the figures are slightly different than those appearing in the Department's annual report. Specifically, the differences are as follows:

- \* Number of beneficiaries tested increased by 283 (4,890 versus 4,607);
- \* Number of beneficiaries fitted with hearing aids increased by 102 to 2,160 from 2,058;
- \* Number of beneficiaries with two hearing aids decreased by 25, from 163 to 138;
- \* Average price of a hearing aid decreased by \$3.30 to \$95.10;
- \* People over 65 years of age constituted 53.7% of the total beneficiaries and 63.4% of the beneficiaries who required a hearing aid rather than the 49.1% and 65.6% indicated; and
- \* The 3,043 repairs indicated were major repairs and do not include 3,171 minor repairs and adjustments made to earmolds, tubing, external cords and wiring. The statistics in this report reflect these repairs.